

F0926-US
(KOY-0021)

CLAIMS

What is claimed is:

1. (currently amended) A radiographic image conversion panel comprising:

a support; and

at least one photostimulable phosphor layer provided on the support,

wherein at least one layer of the photostimulable phosphor layers is formed by a photostimulable phosphor represented by a following general formula (1), and

~~an amount-a density~~ of activation metal atoms at an end of a photostimulable phosphor crystal and ~~an amount-a density~~ of activation metal atoms in the vicinity of the support satisfy a following formula 1:

$0 \leq (\text{the amount-density of the activation metal atoms at the end of the photostimulable phosphor crystal}) / (\text{the amount-density of the activation metal atoms in the vicinity of the support}) < 1$, and

the general formula (1) is expressed by

$$M^1X \cdot aM^2X' \cdot bM^3X''_3 : eA \quad (1)$$

wherein the M^1 is at least one kind of alkali metal selected from a group consisting of Li, Na, K, Rb and Cs, the M^2 is at least one kind of bivalent metal atom selected from a group consisting of Be, Mg, Ca, Sr, Ba, Zn, Cd, Cu and Ni, the M^3 is at least one kind of trivalent metal atom selected from a group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Al, Ga and In, each of the X, the X' and the X'' is at least one kind of halogen selected from a group consisting of F, Cl, Br and I, the A is at least one kind of metal atom selected from a group consisting of Eu, Tb, In, Ce, Tm, Dy, Pr, Ho, Nd, Yb, Er, Gd, Lu, Sm, Y, Tl, Na, Ag, Cu and Mg and each of the a, the b and the e represents a numeric value in a range of $0 \leq a < 0.5$, $0 \leq b < 0.5$ and $0 < e \leq 0.2$.

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2. (canceled)

3. (original) The radiographic image conversion panel of claim 1, wherein the photostimulable phosphor is CsBr:Eu.

4. (canceled)

5. (original) A method for manufacturing the radiographic image conversion panel of claim 1, comprising controlling a deposition rate of a main agent of the photostimulable phosphor and a deposition rate of an activator of the photostimulable phosphor by at least two or more systems.

6-13. (canceled)